

Title (en)

NON-RETURN MECHANISM FOR A MOTOR OF AN ELECTRIC CURTAIN

Title (de)

RÜCKLAUFSPERMESCHANISMUS FÜR EINEN MOTOR EINES ELEKTRISCHEN VORHANGS

Title (fr)

MÉCANISME DE NON-RETOUR POUR UN MOTEUR D'UN RIDEAU ÉLECTRIQUE

Publication

EP 3905489 A1 20211103 (EN)

Application

EP 21167481 A 20210408

Priority

CN 202010363082 A 20200430

Abstract (en)

A non-return mechanism for a motor of an electric curtain is provided which comprises a motor and a gearbox that are successively connected; the output end of the gearbox is connected with a non-return component; the non-return component comprises a flange, an output shaft and a non-return block; the flange is internally provided with an accommodating cavity; the output end of the gearbox is provided with an output bracket; the output bracket is in unidirectional drive fit with one end of the output shaft toward the gearbox and they fit within the accommodating cavity; the non-return block is arranged at the joint of the output bracket and the output shaft; the flange is connected with the gearbox. In the present invention through the coordination of the flange, the output shaft and the non-return block, together with the unidirectional drive fit with the output bracket, a non-return force is effectively generated to steadily maintain the curtain at the required position when the motor stops without damaging the gearbox and the motor as the output shaft reversely drives the gearbox and the motor under the effect of an external force or gravity.

IPC 8 full level

H02K 7/10 (2006.01); **E06B 9/56** (2006.01); **E06B 9/72** (2006.01); **E06B 9/80** (2006.01); **F16D 41/06** (2006.01); **F16D 41/064** (2006.01);
F16D 41/067 (2006.01)

CPC (source: CN EP US)

A47H 5/0325 (2013.01 - US); **E06B 9/56** (2013.01 - CN); **E06B 9/68** (2013.01 - CN); **E06B 9/80** (2013.01 - CN); **E06B 9/82** (2013.01 - CN);
E06B 9/90 (2013.01 - EP); **F16D 41/064** (2013.01 - EP); **F16H 57/021** (2013.01 - US); **H02K 7/102** (2013.01 - EP); **H02K 7/116** (2013.01 - EP US)

Citation (search report)

- [XA] CN 110445302 A 20191112 - HARDA XIAMEN PLASTIC CO LTD
- [XAI] EP 1101968 A1 20010523 - ASMO CO LTD [JP]

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3905489 A1 20211103; EP 3905489 B1 20240925; CN 113585949 A 20211102; JP 3230427 U 20210128; US 2021337996 A1 20211104

DOCDB simple family (application)

EP 21167481 A 20210408; CN 202010363082 A 20200430; JP 2020004896 U 20201113; US 202117196015 A 20210309